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EXAMINER

PYO, MONICA M

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/688,311	Applicant(s) RICHARDSON, ELLEN K.	
	Examiner Monica M. Pyo	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/27/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-24 are present for examination.
2. Claims 1-24 are rejected.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 3/27/2006 was filed and considered by the examiner.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Regarding Claim 9, this claim recites the limitation “refreshing the at least one of the plurality of target tables further comprising hierarchically decomposing the source data in the source database from the select data”, but the specification does not disclose in detail regarding this limitation. More particularly, the specification (pg. 3, lns. 24-25) only disclose about “hierarchically decomposing the source data in the source database from the select data” and does not disclose any relationship with “refreshing the at least one of the plurality of target tables”. Therefore, there is no proper antecedent basis for the claimed subject matter.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Regarding claims 22-24, the word "means" is preceded by the word(s) "for operating", "for selecting" and "for refreshing" in an attempt to use a "means" clause to recite a claim

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element as a means for performing a specified function (i.e. software) while claims 22-24 are claimed to be Apparatus claims.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Regarding claims 22-24, these claims are rejected because the claimed invention is directed to non-statutory subject matter.

MPEP 2106.IV.B.1.(a), (b)

(a) Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listings Per Se

(b) Descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. 101. Thus, Office personnel should consider the claimed invention as a whole to determine whether the necessary functional interrelationship is provided.

8. Claims 22-24, in view of above cited MPEP sections, are not statutory because according to 35 U.S.C. 101, the merely claiming nonfunctional descriptive material stored in a computer readable medium material does not make the invention eligible for patenting. Claims 22-24 are directed to 'software functions', which claims merely functional descriptive material that is not embodied computer readable medium material. Such 'software functions' do not define any structural and functional interrelationship and do not produce any tangible result and/or being limited to a practical application within the technological arts.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-2, 4-11, 15 and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,016,497 issued to Suver (hereafter Suver) in view of U.S. Patent No. 6,029,178 issued to Martin (hereafter Martin).

Claim 1:

Regarding Claim 1, Suver disclose method comprising:

storing a source database on a source, with the source database having a plurality of source tables, with the plurality of source tables having a key field, with the source database having at least one relationship between one table in the source database and another table in a source database using the key field (as CUSTADDRESS and CUSTPHONES for source tables; Suver: col. 8, lns. 6-16; fig. 2), and with the source database having source data in at least one of the plurality of source tables, with the source data related to the key field (as 01SUVER for the key field; Suver: col. 8, lns. 17-27; fig. 2);

storing a target database on a target, with the target database having a plurality of target tables, with the plurality of target tables having the key field (Suver: col. 9, lns. 47-57; col. 10, lns. 32-38; figs. 4 & 5);

providing select data (Suver: col. 7, lns. 61-67; col. 8, lns. 1-5); and

plurality of target tables (Suver: 9, lns. 47-57; fig. 4)

Suver does not explicitly disclose:

only refreshing at least one of the target tables with the source data.

However, Martin disclose:

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only refreshing at least one of the target tables with the source data (Martin: col. 23, lns. 46-52; col. 24, lns. 1-3)

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the Martin's data movement method in a relational database into the Suver's relational database management system. Skilled artisan would have been motivated to incorporate the Martin's teaching of database structure environment in the Suver's teaching of relational database management system to utilize the data movement of EDM method to create and store a change record including capturing changed data (Martin: col. 5, lns. 20-26).

Claim 2:

Regarding Claim 2, Suver and Martin disclose the method with storing the source database further comprising linking the plurality of source tables to determine an include list of tables from the plurality of source tables that exclude tables that contain static data (since Suver does not disclose tables which contain the static data, it is inherent to interpret that Suver excludes tables with static data (Suver: col. 8, lns. 6-16; fig. 2).

Claims 4 and 10:

Regarding Claim 4, Suver and Martin disclose the method with storing the source database further comprising generating a table linking list relating each one of the plurality of target tables with the key field and a send program (Suver: col. 13, lns. 63-57; col. 14, lns. 1-6; col. 20, lns. 44-53) & (Martin: col. 19, lns. 38-43).

Claim 10 is also rejected based upon the same reasoning as Claim 4.

Claim 5:

Regarding Claim 5, Suver and Martin disclose the method with generating the table linking list further comprises selecting a preferred send program (Suver: col. 14, Ins. 14-23; col. 20, Ins. 44-53) & (Martin: col. 19, Ins. 38-43; fig. 15).

Claims 6 & 11:

Regarding Claim 6, Suver and Martin disclose the method with refreshing the at least one of the plurality of target tables further comprises refreshing with the send program related to the at least one of the plurality of target tables (Suver: col. 20, Ins. 44-53) & (Martin: col. 19, Ins. 38-43; col. 23, Ins. 46-52; col. 24, Ins. 1-3).

Claim 11 is also rejected based upon the same reasoning as Claim 6.

Claim 7:

Regarding Claim 7, Suver and Martin disclose the method with storing the source database further comprising generating a filter table linking list relating one of the plurality of source tables with a nonkey field and a condition (Suver: col. 8, Ins. 6-16; fig. 2) & (Martin: col. 28, Ins. 64-67; col. 29, Ins. 1-3; 47-51).

Claim 8:

Regarding Claim 8, Suver and Martin disclose the method with refreshing the at least one of the plurality of target tables further comprises providing a user specified data value to refresh (Suver: col. 8, Ins. 6-26; col. 22, Ins. 66-67; col. 23, Ins. 1) & (Martin: col. 23, Ins. 46-52; col. 24, Ins. 1-3).

Claim 9:

Regarding Claim 9, Suver and Martin disclose the method with refreshing the at least one of the plurality of target tables further comprising hierarchically decomposing the source data in

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the source database from the select data (Suver: col. 3, lns. 52-55; col. 17, lns. 1-13) & (Martin: col. 23, lns. 46-52; col. 24, lns. 1-3).

Claim 11:

Regarding Claim 11, Suver and Martin disclose the method with refreshing the at least one of the plurality of target tables further comprising refreshing with the send program related to one of the plurality of target tables (Martin: col. 24, lns. 1-3) (Martin: col. 19, lns. 38-43; col. 23, lns. 46-52; col. 24, lns. 1-3).

Claim 15:

Regarding Claim 15, Suver disclose method comprising setting up a source database having a plurality of tables with each one of the plurality of tables having a key field; linking the source database to correlate the at least one table, the key field (Suver: col. 8, lns. 6-16; fig. 2) and; and

Suver does not explicitly disclose:

a transfer program;

sending at least one table for transfer by the transfer program;

selecting at least one key field value for refresh;

receiving at least one table for refresh into a target database.

However, Martin disclose:

a transfer program (Martin: col. 9, lns. 17-28; fig. 2);

sending at least one table for transfer by the transfer program (col. 17, lns. 15-22; col. 24, lns. 1-3);

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selecting at least one key field value for refresh (Martin: col. 23, lns. 37-45; col. 24, lns. 1-3);

receiving at least one table for refresh into a target database (Martin: col. 24, lns. 1-3).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the Martin's data movement method in a relational database into the Suver's relational database management system. Skilled artisan would have been motivated to incorporate the Martin's teaching of database structure environment in the Suver's teaching of relational database management system to utilize the data movement of EDM method to create and store a change record including capturing changed data (Martin: col. 5, lns. 20-26).

Claims 19 and 22:

Regarding Claim 19, Suver disclose method comprising:

operating a source database having a plurality of data items (Suver: col. 8, lns. 6-16; fig. 2);

selecting at least one data item from the source database (Suver: col. 9, lns. 47-57); and
data items from the plurality of data items in the source database only having a database relationship with the selected at least one data item (Suver: col. 12, lns. 65-67; col. 13, lns. 1-6; fig. 5).

Suver does not explicitly disclose:

refreshing the target database.

However, Martin disclose:

refreshing the target database refreshing the target database (Martin: col. 23, lns. 46-52; col. 24, lns. 1-3);

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the Martin's data movement method in a relational database into the Suver's relational database management system. Skilled artisan would have been motivated to incorporate the Martin's teaching of database structure environment in the Suver's teaching of relational database management system to utilize the data movement of EDM method to create and store a change record including capturing changed data (Martin: col. 5, lns. 20-26).

Claim 22 is also rejected based upon the same reasoning as Claim 19.

Claims 20 and 23:

Regarding Claim 20, Suver and Martin disclose the method with refreshing the target database (Martin: col. 23, lns. 46-52; col. 24, lns. 1-3) further comprises refreshing the target database with data items from the plurality of data items in the source database (Suver: col. 8, lns. 6-16; fig. 2) only having a data table database relationship with the selected at least one data item (Suver: col. 13, lns. 53-59; fig. 4).

Claim 23 is also rejected based upon the same reasoning as Claim 20.

Claims 21 and 24:

Regarding Claim 21, Suver and Martin disclose the method with refreshing the target database (Martin: col. 23, lns. 46-52; col. 24, lns. 1-3) further comprises refreshing the target database with data items from the plurality of data items in the source database (Suver: col. 8, lns. 6-16; fig. 2) only having a data table key field based database relationship with the selected at least one data item (Suver: col. 13, lns. 53-59; fig. 4).

Claim 24 is also rejected based upon the same reasoning as Claim 21.

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suver in view of Martin, and further in view of U.S. Patent Application Publication No. 2004/0064543 by Ashutosh et al. (hereafter Ashutosh).

Claim 3:

Regarding Claim 3, Suver and Martin does not explicitly disclose the method with the static data being configuration data.

However, Ashutosh disclose the method with the static data being configuration data (Ashutosh: [0006], Ins. 18-21).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the Ashutosh's table with configuration data into the Martin's data movement method in a relational database and the Suver's relational database management system. Skilled artisan would have been motivated to incorporate the Ashutosh's teaching to storage domain management process in the Martin's teaching of database structure environment in the Suver's teaching of relational database management system to utilize the monitoring process of monitoring data flow (Ashutosh: see Abstract).

12. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. in view of Suver.

Claim 12:

Regarding Claim 12, Martin disclose apparatus comprising, in combination:

a production system having a production database (Martin: col. 17, Ins. 15-22; fig. 12);

a production storage connected to the production system to store the production database with the production database having at least two tables (Martin: col. 7, lns. 44-47; col. 10, lns. 30-41; figs. 1 & 2), and

a development system connected to the production system, with the development system having a development database (Martin: col. 8, lns. 32-39; figs. 1 & 2);

a development storage for storing the development database connected to the development system (Martin: col. 9, lns. 17-28; fig. 2);

a user interface for accepting a selected data item (Martin: col. 10, lns. 48-61; fig. 3); and
a linked database transfer system executing on the production system and the development system such that the transfer system refreshes the development data base of the development system (Martin: col. 4, lns. 45-49; col. 17, lns. 15-22; col. 24, lns. 1-3).

Martin does not explicitly disclose:

a multitable linked data structure between at least two tables;

However, Suver disclose:

a multitable linked data structure between at least two tables (Suver: col. 9, lns. 27-36);

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the Suver's relational database management system into the Martin's data movement method in a relational database system. Skilled artisan would have been motivated to incorporate the Suver's teaching of storing and accessing data in the Martin's teaching of database structure environment between source and target databases to utilize the linked data records (Suver: col. 9, lns. 41-46; fig. 4).

Claim 13:

Regarding Claim 13, Martin and Suver disclose the apparatus further comprising, in combination, a test system connected to the production system, with the test system having a test database; and with the test system having a test storage connected to the test system for storage of the test database (Suver: col. 23, lns. 13-19; col. 26, lns. 11-18; fig. 17) & (Martin: col. 17, lns. 15-22; fig. 12).

Claim 14:

Regarding Claim 14, Martin and Suver disclose the apparatus further comprising, in combination, a training system connected to the test system and the development system; and a training system storage connected to the training system (Suver: col. 23, lns. 13-19) & (Martin: col. 7, lns. 35-47; fig. 1).

13. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suver in view of Ashutosh.

Claim 16:

Regarding Claim 16, Suver disclose method comprising:

writing a database of a plurality of tables with the tables each having a name with at least one of the plurality of (Suver: col. 2, lns. 6-27; fig. 2);

generating an exclusion list by examining records in the database of tables (Suver: col. 25, lns. 53-63; fig. 17); and

entering the names of tables in the exclusion list in database of tables (Suver: col. 25, lns. 60-63).

Suver does not explicitly disclose:

tables having static data

Ashutosh disclose:

table having static data (Ashutosh: [0006], lns. 18-21).

It would have been obvious to a person with ordinary skill in the art at the time of invention to apply the Ashutosh's table with configuration data into the Suver's relational database management system. Skilled artisan would have been motivated to incorporate the Ashutosh's teaching to storage domain management process in the Suver's teaching of relational database management system to utilize the monitoring process of monitoring data flow (Ashutosh: see Abstract).

Claim 17:

Regarding Claim 17, Suver and Ashutosh disclose the method with generating the exclusion list further comprises appending predetermined tables to the exclusion list (Suver: col. 25, lns. 53-63; col. 26, lns. 1-10).

Claim 18:

Regarding Claim 18, Suver and Ashutosh disclose the method with appending the predetermined tables for the exclusion list comprises using a programmatic list (Suver: col. 25, lns. 53-63; col. 26, lns. 25-29).


Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica M. Pyo whose telephone number is 571-272-8192. The examiner can normally be reached on Mon-Fri 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monica M Pyo
Examiner
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